


# ACKNOWLEDGEMENT RECEIPT

Electronic Version

Stylesheet Version v01

| <b>Title of Invention</b> | On-Bit, Analog Multiplexer for Transmission of Multi-Channel Drilling Information  |  |                          |                   |           |              |   |            |                    |      |            |            |                |       |            |            |                |       |            |              |                    |      |            |              |                  |       |            |              |                  |       |            |                |                  |       |            |                |                  |       |            |                  |                       |       |            |                  |                         |       |            |                  |                      |       |            |                  |          |      |            |                  |             |       |            |                  |                     |       |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |
|---------------------------|--|--|--------------------------|-------------------|-----------|--------------|---|------------|--------------------|------|------------|------------|----------------|-------|------------|------------|----------------|-------|------------|--------------|--------------------|------|------------|--------------|------------------|-------|------------|--------------|------------------|-------|------------|----------------|------------------|-------|------------|----------------|------------------|-------|------------|------------------|-----------------------|-------|------------|------------------|-------------------------|-------|------------|------------------|----------------------|-------|------------|------------------|----------|------|------------|------------------|-------------|-------|------------|------------------|---------------------|-------|------------|------------------|-------------|------|------------|------------------|-------------|------|------------|------------------|-------------|------|------------|------------------|-------------|------|------------|------------------|-------------|------|------------|------------------|-------------|------|------------|------------------|------------|------|------------|------------------|-------------|------|------------|------------------|-------------|------|------------|------------------|-------------|------|------------|------------------|-------------|------|------------|------------------|------------|------|------------|------------------|-------------|------|------------|------------------|-------------|------|------------|------------------|------------|------|------------|------------------|-------------|------|------------|
| Submission Type :         | Utility Patent Filing  |  |                          |                   |           |              |   |            |                    |      |            |            |                |       |            |            |                |       |            |              |                    |      |            |              |                  |       |            |              |                  |       |            |                |                  |       |            |                |                  |       |            |                  |                       |       |            |                  |                         |       |            |                  |                      |       |            |                  |          |      |            |                  |             |       |            |                  |                     |       |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |
| Application Number:       | 10/709108  |  |                          |                   |           |              |   |            |                    |      |            |            |                |       |            |            |                |       |            |              |                    |      |            |              |                  |       |            |              |                  |       |            |                |                  |       |            |                |                  |       |            |                  |                       |       |            |                  |                         |       |            |                  |                      |       |            |                  |          |      |            |                  |             |       |            |                  |                     |       |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |
| EFS ID:                   | 58961  |  |                          |                   |           |              |   |            |                    |      |            |            |                |       |            |            |                |       |            |              |                    |      |            |              |                  |       |            |              |                  |       |            |                |                  |       |            |                |                  |       |            |                  |                       |       |            |                  |                         |       |            |                  |                      |       |            |                  |          |      |            |                  |             |       |            |                  |                     |       |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |
| Server Response:          | <table border="1"> <thead> <tr> <th>Confirmation Code</th> <th>Message</th> </tr> </thead> <tbody> <tr> <td>ISVR1</td> <td>Submission was successfully submitted - Even if Informational or Warning Messages appear below, please do not resubmit this application</td> </tr> <tr> <td>ICON1</td> <td>3107</td> </tr> </tbody> </table>  |  |                          | Confirmation Code | Message   | ISVR1        | Submission was successfully submitted - Even if Informational or Warning Messages appear below, please do not resubmit this application | ICON1      | 3107               |      |            |            |                |       |            |            |                |       |            |              |                    |      |            |              |                  |       |            |              |                  |       |            |                |                  |       |            |                |                  |       |            |                  |                       |       |            |                  |                         |       |            |                  |                      |       |            |                  |          |      |            |                  |             |       |            |                  |                     |       |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |
| Confirmation Code         | Message  |  |                          |                   |           |              |   |            |                    |      |            |            |                |       |            |            |                |       |            |              |                    |      |            |              |                  |       |            |              |                  |       |            |                |                  |       |            |                |                  |       |            |                  |                       |       |            |                  |                         |       |            |                  |                      |       |            |                  |          |      |            |                  |             |       |            |                  |                     |       |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |
| ISVR1                     | Submission was successfully submitted - Even if Informational or Warning Messages appear below, please do not resubmit this application  |  |                          |                   |           |              |   |            |                    |      |            |            |                |       |            |            |                |       |            |              |                    |      |            |              |                  |       |            |              |                  |       |            |                |                  |       |            |                |                  |       |            |                  |                       |       |            |                  |                         |       |            |                  |                      |       |            |                  |          |      |            |                  |             |       |            |                  |                     |       |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |
| ICON1                     | 3107   |  |                          |                   |           |              |   |            |                    |      |            |            |                |       |            |            |                |       |            |              |                    |      |            |              |                  |       |            |              |                  |       |            |                |                  |       |            |                |                  |       |            |                  |                       |       |            |                  |                         |       |            |                  |                      |       |            |                  |          |      |            |                  |             |       |            |                  |                     |       |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |
| First Named Applicant:    | Marcel Boucher   |  |                          |                   |           |              |   |            |                    |      |            |            |                |       |            |            |                |       |            |              |                    |      |            |              |                  |       |            |              |                  |       |            |                |                  |       |            |                |                  |       |            |                  |                       |       |            |                  |                         |       |            |                  |                      |       |            |                  |          |      |            |                  |             |       |            |                  |                     |       |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |
| Attorney Docket Number:   | 78.1178  |  |                          |                   |           |              |   |            |                    |      |            |            |                |       |            |            |                |       |            |              |                    |      |            |              |                  |       |            |              |                  |       |            |                |                  |       |            |                |                  |       |            |                  |                       |       |            |                  |                         |       |            |                  |                      |       |            |                  |          |      |            |                  |             |       |            |                  |                     |       |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |
| Timestamp:                | 2004-04-14 12:08:46 EDT  |  |                          |                   |           |              |   |            |                    |      |            |            |                |       |            |            |                |       |            |              |                    |      |            |              |                  |       |            |              |                  |       |            |                |                  |       |            |                |                  |       |            |                  |                       |       |            |                  |                         |       |            |                  |                      |       |            |                  |          |      |            |                  |             |       |            |                  |                     |       |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |
| From:                     | us   |  |                          |                   |           |              |   |            |                    |      |            |            |                |       |            |            |                |       |            |              |                    |      |            |              |                  |       |            |              |                  |       |            |                |                  |       |            |                |                  |       |            |                  |                       |       |            |                  |                         |       |            |                  |                      |       |            |                  |          |      |            |                  |             |       |            |                  |                     |       |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |
| File Listing:             | <table border="1"> <thead> <tr> <th>Doc. Name</th> <th>File Name</th> <th>Size (Bytes)</th> <th>Date Produced (yyyymmdd)</th> </tr> </thead> <tbody> <tr><td>us-request</td><td>78-1178-usrequ.xml</td><td>3259</td><td>2004-04-14</td></tr> <tr><td>us-request</td><td>us-request.dtd</td><td>19064</td><td>2004-04-14</td></tr> <tr><td>us-request</td><td>us-request.xml</td><td>33300</td><td>2004-04-14</td></tr> <tr><td>us-fee-sheet</td><td>78-1178-usfees.xml</td><td>1655</td><td>2004-04-14</td></tr> <tr><td>us-fee-sheet</td><td>us-fee-sheet.xml</td><td>24912</td><td>2004-04-14</td></tr> <tr><td>us-fee-sheet</td><td>us-fee-sheet.dtd</td><td>11069</td><td>2004-04-14</td></tr> <tr><td>us-declaration</td><td>78-1178Dec_1.tif</td><td>60062</td><td>2004-04-14</td></tr> <tr><td>us-declaration</td><td>78-1178Dec_2.tif</td><td>39922</td><td>2004-04-14</td></tr> <tr><td>application-body</td><td>78-1178Spec-trans.xml</td><td>66864</td><td>2004-04-14</td></tr> <tr><td>application-body</td><td>us-application-body.xml</td><td>83497</td><td>2004-04-14</td></tr> <tr><td>application-body</td><td>application-body.dtd</td><td>49498</td><td>2004-04-14</td></tr> <tr><td>application-body</td><td>wipo.ent</td><td>4956</td><td>2004-04-14</td></tr> <tr><td>application-body</td><td>mathml2.dtd</td><td>54588</td><td>2004-04-14</td></tr> <tr><td>application-body</td><td>mathml2-qname-1.mod</td><td>13225</td><td>2004-04-14</td></tr> <tr><td>application-body</td><td>isoamsa.ent</td><td>5191</td><td>2004-04-14</td></tr> <tr><td>application-body</td><td>isoamsb.ent</td><td>3988</td><td>2004-04-14</td></tr> <tr><td>application-body</td><td>isoamsc.ent</td><td>1460</td><td>2004-04-14</td></tr> <tr><td>application-body</td><td>isoamsn.ent</td><td>5620</td><td>2004-04-14</td></tr> <tr><td>application-body</td><td>isoamso.ent</td><td>1934</td><td>2004-04-14</td></tr> <tr><td>application-body</td><td>isoamsr.ent</td><td>7073</td><td>2004-04-14</td></tr> <tr><td>application-body</td><td>isogr3.ent</td><td>3559</td><td>2004-04-14</td></tr> <tr><td>application-body</td><td>isomfrk.ent</td><td>4553</td><td>2004-04-14</td></tr> <tr><td>application-body</td><td>isomopf.ent</td><td>2571</td><td>2004-04-14</td></tr> <tr><td>application-body</td><td>isomscr.ent</td><td>4628</td><td>2004-04-14</td></tr> <tr><td>application-body</td><td>isotech.ent</td><td>5268</td><td>2004-04-14</td></tr> <tr><td>application-body</td><td>isobox.ent</td><td>3568</td><td>2004-04-14</td></tr> <tr><td>application-body</td><td>isocyr1.ent</td><td>5345</td><td>2004-04-14</td></tr> <tr><td>application-body</td><td>isocyr2.ent</td><td>2504</td><td>2004-04-14</td></tr> <tr><td>application-body</td><td>isodia.ent</td><td>1508</td><td>2004-04-14</td></tr> <tr><td>application-body</td><td>isolat1.ent</td><td>5282</td><td>2004-04-14</td></tr> </tbody> </table> |  |                          | Doc. Name         | File Name | Size (Bytes) | Date Produced (yyyymmdd)  | us-request | 78-1178-usrequ.xml | 3259 | 2004-04-14 | us-request | us-request.dtd | 19064 | 2004-04-14 | us-request | us-request.xml | 33300 | 2004-04-14 | us-fee-sheet | 78-1178-usfees.xml | 1655 | 2004-04-14 | us-fee-sheet | us-fee-sheet.xml | 24912 | 2004-04-14 | us-fee-sheet | us-fee-sheet.dtd | 11069 | 2004-04-14 | us-declaration | 78-1178Dec_1.tif | 60062 | 2004-04-14 | us-declaration | 78-1178Dec_2.tif | 39922 | 2004-04-14 | application-body | 78-1178Spec-trans.xml | 66864 | 2004-04-14 | application-body | us-application-body.xml | 83497 | 2004-04-14 | application-body | application-body.dtd | 49498 | 2004-04-14 | application-body | wipo.ent | 4956 | 2004-04-14 | application-body | mathml2.dtd | 54588 | 2004-04-14 | application-body | mathml2-qname-1.mod | 13225 | 2004-04-14 | application-body | isoamsa.ent | 5191 | 2004-04-14 | application-body | isoamsb.ent | 3988 | 2004-04-14 | application-body | isoamsc.ent | 1460 | 2004-04-14 | application-body | isoamsn.ent | 5620 | 2004-04-14 | application-body | isoamso.ent | 1934 | 2004-04-14 | application-body | isoamsr.ent | 7073 | 2004-04-14 | application-body | isogr3.ent | 3559 | 2004-04-14 | application-body | isomfrk.ent | 4553 | 2004-04-14 | application-body | isomopf.ent | 2571 | 2004-04-14 | application-body | isomscr.ent | 4628 | 2004-04-14 | application-body | isotech.ent | 5268 | 2004-04-14 | application-body | isobox.ent | 3568 | 2004-04-14 | application-body | isocyr1.ent | 5345 | 2004-04-14 | application-body | isocyr2.ent | 2504 | 2004-04-14 | application-body | isodia.ent | 1508 | 2004-04-14 | application-body | isolat1.ent | 5282 | 2004-04-14 |
| Doc. Name                 | File Name  | Size (Bytes)   | Date Produced (yyyymmdd) |                   |           |              |   |            |                    |      |            |            |                |       |            |            |                |       |            |              |                    |      |            |              |                  |       |            |              |                  |       |            |                |                  |       |            |                |                  |       |            |                  |                       |       |            |                  |                         |       |            |                  |                      |       |            |                  |          |      |            |                  |             |       |            |                  |                     |       |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |
| us-request                | 78-1178-usrequ.xml   | 3259   | 2004-04-14               |                   |           |              |   |            |                    |      |            |            |                |       |            |            |                |       |            |              |                    |      |            |              |                  |       |            |              |                  |       |            |                |                  |       |            |                |                  |       |            |                  |                       |       |            |                  |                         |       |            |                  |                      |       |            |                  |          |      |            |                  |             |       |            |                  |                     |       |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |
| us-request                | us-request.dtd   | 19064  | 2004-04-14               |                   |           |              |   |            |                    |      |            |            |                |       |            |            |                |       |            |              |                    |      |            |              |                  |       |            |              |                  |       |            |                |                  |       |            |                |                  |       |            |                  |                       |       |            |                  |                         |       |            |                  |                      |       |            |                  |          |      |            |                  |             |       |            |                  |                     |       |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |
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| us-fee-sheet              | us-fee-sheet.xml   | 24912  | 2004-04-14               |                   |           |              |   |            |                    |      |            |            |                |       |            |            |                |       |            |              |                    |      |            |              |                  |       |            |              |                  |       |            |                |                  |       |            |                |                  |       |            |                  |                       |       |            |                  |                         |       |            |                  |                      |       |            |                  |          |      |            |                  |             |       |            |                  |                     |       |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |
| us-fee-sheet              | us-fee-sheet.dtd   | 11069  | 2004-04-14               |                   |           |              |   |            |                    |      |            |            |                |       |            |            |                |       |            |              |                    |      |            |              |                  |       |            |              |                  |       |            |                |                  |       |            |                |                  |       |            |                  |                       |       |            |                  |                         |       |            |                  |                      |       |            |                  |          |      |            |                  |             |       |            |                  |                     |       |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |
| us-declaration            | 78-1178Dec_1.tif   | 60062  | 2004-04-14               |                   |           |              |   |            |                    |      |            |            |                |       |            |            |                |       |            |              |                    |      |            |              |                  |       |            |              |                  |       |            |                |                  |       |            |                |                  |       |            |                  |                       |       |            |                  |                         |       |            |                  |                      |       |            |                  |          |      |            |                  |             |       |            |                  |                     |       |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |
| us-declaration            | 78-1178Dec_2.tif   | 39922  | 2004-04-14               |                   |           |              |   |            |                    |      |            |            |                |       |            |            |                |       |            |              |                    |      |            |              |                  |       |            |              |                  |       |            |                |                  |       |            |                |                  |       |            |                  |                       |       |            |                  |                         |       |            |                  |                      |       |            |                  |          |      |            |                  |             |       |            |                  |                     |       |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |
| application-body          | 78-1178Spec-trans.xml  | 66864  | 2004-04-14               |                   |           |              |   |            |                    |      |            |            |                |       |            |            |                |       |            |              |                    |      |            |              |                  |       |            |              |                  |       |            |                |                  |       |            |                |                  |       |            |                  |                       |       |            |                  |                         |       |            |                  |                      |       |            |                  |          |      |            |                  |             |       |            |                  |                     |       |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |
| application-body          | us-application-body.xml  | 83497  | 2004-04-14               |                   |           |              |   |            |                    |      |            |            |                |       |            |            |                |       |            |              |                    |      |            |              |                  |       |            |              |                  |       |            |                |                  |       |            |                |                  |       |            |                  |                       |       |            |                  |                         |       |            |                  |                      |       |            |                  |          |      |            |                  |             |       |            |                  |                     |       |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |
| application-body          | application-body.dtd   | 49498  | 2004-04-14               |                   |           |              |   |            |                    |      |            |            |                |       |            |            |                |       |            |              |                    |      |            |              |                  |       |            |              |                  |       |            |                |                  |       |            |                |                  |       |            |                  |                       |       |            |                  |                         |       |            |                  |                      |       |            |                  |          |      |            |                  |             |       |            |                  |                     |       |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |
| application-body          | wipo.ent   | 4956   | 2004-04-14               |                   |           |              |   |            |                    |      |            |            |                |       |            |            |                |       |            |              |                    |      |            |              |                  |       |            |              |                  |       |            |                |                  |       |            |                |                  |       |            |                  |                       |       |            |                  |                         |       |            |                  |                      |       |            |                  |          |      |            |                  |             |       |            |                  |                     |       |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |
| application-body          | mathml2.dtd  | 54588  | 2004-04-14               |                   |           |              |   |            |                    |      |            |            |                |       |            |            |                |       |            |              |                    |      |            |              |                  |       |            |              |                  |       |            |                |                  |       |            |                |                  |       |            |                  |                       |       |            |                  |                         |       |            |                  |                      |       |            |                  |          |      |            |                  |             |       |            |                  |                     |       |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |
| application-body          | mathml2-qname-1.mod  | 13225  | 2004-04-14               |                   |           |              |   |            |                    |      |            |            |                |       |            |            |                |       |            |              |                    |      |            |              |                  |       |            |              |                  |       |            |                |                  |       |            |                |                  |       |            |                  |                       |       |            |                  |                         |       |            |                  |                      |       |            |                  |          |      |            |                  |             |       |            |                  |                     |       |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |
| application-body          | isoamsa.ent  | 5191   | 2004-04-14               |                   |           |              |   |            |                    |      |            |            |                |       |            |            |                |       |            |              |                    |      |            |              |                  |       |            |              |                  |       |            |                |                  |       |            |                |                  |       |            |                  |                       |       |            |                  |                         |       |            |                  |                      |       |            |                  |          |      |            |                  |             |       |            |                  |                     |       |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |
| application-body          | isoamsb.ent  | 3988   | 2004-04-14               |                   |           |              |   |            |                    |      |            |            |                |       |            |            |                |       |            |              |                    |      |            |              |                  |       |            |              |                  |       |            |                |                  |       |            |                |                  |       |            |                  |                       |       |            |                  |                         |       |            |                  |                      |       |            |                  |          |      |            |                  |             |       |            |                  |                     |       |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |
| application-body          | isoamsc.ent  | 1460   | 2004-04-14               |                   |           |              |   |            |                    |      |            |            |                |       |            |            |                |       |            |              |                    |      |            |              |                  |       |            |              |                  |       |            |                |                  |       |            |                |                  |       |            |                  |                       |       |            |                  |                         |       |            |                  |                      |       |            |                  |          |      |            |                  |             |       |            |                  |                     |       |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |
| application-body          | isoamsn.ent  | 5620   | 2004-04-14               |                   |           |              |   |            |                    |      |            |            |                |       |            |            |                |       |            |              |                    |      |            |              |                  |       |            |              |                  |       |            |                |                  |       |            |                |                  |       |            |                  |                       |       |            |                  |                         |       |            |                  |                      |       |            |                  |          |      |            |                  |             |       |            |                  |                     |       |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |
| application-body          | isoamso.ent  | 1934   | 2004-04-14               |                   |           |              |   |            |                    |      |            |            |                |       |            |            |                |       |            |              |                    |      |            |              |                  |       |            |              |                  |       |            |                |                  |       |            |                |                  |       |            |                  |                       |       |            |                  |                         |       |            |                  |                      |       |            |                  |          |      |            |                  |             |       |            |                  |                     |       |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |
| application-body          | isoamsr.ent  | 7073   | 2004-04-14               |                   |           |              |   |            |                    |      |            |            |                |       |            |            |                |       |            |              |                    |      |            |              |                  |       |            |              |                  |       |            |                |                  |       |            |                |                  |       |            |                  |                       |       |            |                  |                         |       |            |                  |                      |       |            |                  |          |      |            |                  |             |       |            |                  |                     |       |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |
| application-body          | isogr3.ent   | 3559   | 2004-04-14               |                   |           |              |   |            |                    |      |            |            |                |       |            |            |                |       |            |              |                    |      |            |              |                  |       |            |              |                  |       |            |                |                  |       |            |                |                  |       |            |                  |                       |       |            |                  |                         |       |            |                  |                      |       |            |                  |          |      |            |                  |             |       |            |                  |                     |       |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |
| application-body          | isomfrk.ent  | 4553   | 2004-04-14               |                   |           |              |   |            |                    |      |            |            |                |       |            |            |                |       |            |              |                    |      |            |              |                  |       |            |              |                  |       |            |                |                  |       |            |                |                  |       |            |                  |                       |       |            |                  |                         |       |            |                  |                      |       |            |                  |          |      |            |                  |             |       |            |                  |                     |       |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |
| application-body          | isomopf.ent  | 2571   | 2004-04-14               |                   |           |              |   |            |                    |      |            |            |                |       |            |            |                |       |            |              |                    |      |            |              |                  |       |            |              |                  |       |            |                |                  |       |            |                |                  |       |            |                  |                       |       |            |                  |                         |       |            |                  |                      |       |            |                  |          |      |            |                  |             |       |            |                  |                     |       |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |
| application-body          | isomscr.ent  | 4628   | 2004-04-14               |                   |           |              |   |            |                    |      |            |            |                |       |            |            |                |       |            |              |                    |      |            |              |                  |       |            |              |                  |       |            |                |                  |       |            |                |                  |       |            |                  |                       |       |            |                  |                         |       |            |                  |                      |       |            |                  |          |      |            |                  |             |       |            |                  |                     |       |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |
| application-body          | isotech.ent  | 5268   | 2004-04-14               |                   |           |              |   |            |                    |      |            |            |                |       |            |            |                |       |            |              |                    |      |            |              |                  |       |            |              |                  |       |            |                |                  |       |            |                |                  |       |            |                  |                       |       |            |                  |                         |       |            |                  |                      |       |            |                  |          |      |            |                  |             |       |            |                  |                     |       |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |
| application-body          | isobox.ent   | 3568   | 2004-04-14               |                   |           |              |   |            |                    |      |            |            |                |       |            |            |                |       |            |              |                    |      |            |              |                  |       |            |              |                  |       |            |                |                  |       |            |                |                  |       |            |                  |                       |       |            |                  |                         |       |            |                  |                      |       |            |                  |          |      |            |                  |             |       |            |                  |                     |       |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |
| application-body          | isocyr1.ent  | 5345   | 2004-04-14               |                   |           |              |   |            |                    |      |            |            |                |       |            |            |                |       |            |              |                    |      |            |              |                  |       |            |              |                  |       |            |                |                  |       |            |                |                  |       |            |                  |                       |       |            |                  |                         |       |            |                  |                      |       |            |                  |          |      |            |                  |             |       |            |                  |                     |       |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |
| application-body          | isocyr2.ent  | 2504   | 2004-04-14               |                   |           |              |   |            |                    |      |            |            |                |       |            |            |                |       |            |              |                    |      |            |              |                  |       |            |              |                  |       |            |                |                  |       |            |                |                  |       |            |                  |                       |       |            |                  |                         |       |            |                  |                      |       |            |                  |          |      |            |                  |             |       |            |                  |                     |       |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |
| application-body          | isodia.ent   | 1508   | 2004-04-14               |                   |           |              |   |            |                    |      |            |            |                |       |            |            |                |       |            |              |                    |      |            |              |                  |       |            |              |                  |       |            |                |                  |       |            |                |                  |       |            |                  |                       |       |            |                  |                         |       |            |                  |                      |       |            |                  |          |      |            |                  |             |       |            |                  |                     |       |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |
| application-body          | isolat1.ent  | 5282   | 2004-04-14               |                   |           |              |   |            |                    |      |            |            |                |       |            |            |                |       |            |              |                    |      |            |              |                  |       |            |              |                  |       |            |                |                  |       |            |                |                  |       |            |                  |                       |       |            |                  |                         |       |            |                  |                      |       |            |                  |          |      |            |                  |             |       |            |                  |                     |       |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |                  |             |      |            |                  |            |      |            |                  |             |      |            |

| Doc. Name        | File Name           | Size (Bytes) | Date Produced (yyyymmdd) |
|------------------|---------------------|--------------|--------------------------|
| application-body | isolat2.ent         | 9007         | 2004-04-14               |
| application-body | isonum.ent          | 5913         | 2004-04-14               |
| application-body | isopub.ent          | 6621         | 2004-04-14               |
| application-body | mmlextra.ent        | 7901         | 2004-04-14               |
| application-body | mmlalias.ent        | 38209        | 2004-04-14               |
| application-body | soextblx.dtd        | 12870        | 2004-04-14               |
| application-body | Figs_01.tif         | 12112        | 2004-04-14               |
| application-body | Figs_02.tif         | 22376        | 2004-04-14               |
| application-body | Figs_03.tif         | 17478        | 2004-04-14               |
| application-body | Figs_04.tif         | 15458        | 2004-04-14               |
| application-body | Figs_05.tif         | 14928        | 2004-04-14               |
| application-body | Figs_06.tif         | 18472        | 2004-04-14               |
| application-body | Figs_07.tif         | 16766        | 2004-04-14               |
| application-body | Figs_08.tif         | 30790        | 2004-04-14               |
| application-body | Figs_09.tif         | 28142        | 2004-04-14               |
| application-body | Figs_10.tif         | 25088        | 2004-04-14               |
| us-declaration   | 78-1178Dec_3.tif    | 44158        | 2004-04-14               |
| package-data     | 78-1178-pkda.xml    | 8469         | 2004-04-14               |
| package-data     | package-data.dtd    | 27025        | 2004-04-14               |
| package-data     | us-package-data.xsl | 19263        | 2004-04-14               |
| Total files size |                     | 910969       |                          |

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